

### **REMARKS**

Please reconsider the application in view of the above amendments and the following remarks. Applicants thank the Examiner for carefully considering this application.

#### **Disposition of Claims**

Claims 1-58 were pending in this application. Claims 6, 16, and 26 are canceled without prejudice or disclaimer. Accordingly, claims 1-5, 7-15, 17-25, and 27-58 are now pending in this application. Claims 1, 11, and 21 are independent. The remaining claims depend, either directly or indirectly, from claims 1, 11, and 21.

#### **Examiner Interview**

Applicants thank the Examiner for courtesies extended during the Examiner Interview conducted on January 12, 2009. During the Examiner Interview, Applicants' representative discussed the claimed invention and the cited prior art. The arguments presented in this response are substantially similar to those discussed during the Examiner Interview. No agreement was reached.

#### **Claim Amendments**

Claims 1, 11, and 21 are amended to clarify aspects of the invention and to incorporate limitations of canceled claims 6, 16, and 26, respectively. No new matter is added by these amendments as support for the amendments may be found, for example, in paragraphs [0053], [0072], [00167], [00188], and [00204] of the Instant Specification. Further, claims 2, 7, 12, 17, 22, 27, 32, 38-39, 41-43, 46, 52-53, and 55-57 are amended for conformity with the amendments to claims 1, 11, and 21.

**Rejections under 35 U.S.C. § 103**

Claims 1-58 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Primavera Project Planner as evidenced by at least *Primavera Project Planner: Planning and Control Guide Version 3.0* (1999) (“Primavera”) in view of Choi et al., *Task net: Transactional Workflow Model based on Colored Petri Net* (2002) (“Choi”) and further in view of Sriramdas, *Systems Analysis of Drilling Engineering and Management to Design a Relational Database* (1998) (“Sriramdas”). As discussed above, claims 6, 16, and 26 are canceled by way of this reply; thus, the rejection is now moot with respect to the canceled claims. To the extent that this rejection may still apply to the remaining claims, the rejection is respectfully traversed.

MPEP § 2143 states that “[t]he key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.” Further, when combining prior art elements, the Examiner “must articulate the following: (1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference; ...” MPEP § 2143(A).

Amended independent claim 1 recites, in part, “changing, ... , one of said sets of input data,” “identifying a portion of said one or more sets of instructions affected by said changed input data based on said task dependency,” and “re-executing, by said task manager, said portion of said one or more sets of instructions.” In other words, amended independent claim 1 requires, in part, re-executing a portion of tasks, where the portion of the tasks is determined using a task dependency to

identify the instructions affected by a change in input data. *See* Instant Specification, paragraph [00204].

In contrast, Primavera teaches that changes in information may require activities to be rescheduled. *See* Primavera, page 64. In other words, Primavera only teaches that the time an activity is scheduled to begin may be updated based on a change in scheduling information. Simply updating the time is not sufficient to teach the selectively re-executing activities. Accordingly, Primavera fails to teach that activities may be selectively re-executed based on changes to input data related to the activities. In view of this, Primavera fails to teach or suggest re-executing a portion of tasks, where the portion of the tasks is determined using a task dependency to identify the instructions affected by a change in input data as explicitly recited in amended independent claim 1.

Furthermore, Choi fails to provide that which Primavera lacks. More specifically, Choi only teaches restoring or resuming failed tasks. *See* Choi, pages 396-397, Section 4.5. In other words, Choi teaches that the active state of a workflow may be managed as the workflow is being executed. *See id.* However, Choi fails to teach that the tasks may be completed and then selectively re-executed based on changes to input data related to the tasks. In view of this, Choi fails to teach or suggest re-executing a portion of tasks, where the portion of the tasks is determined using a task dependency to identify the instructions affected by a change in input data as explicitly recited in amended independent claim 1.

Moreover, Sriramdas fails to provide that which Primavera and Choi lack, as evidenced by the fact that the Examiner has relied on Sriramdas solely to teach limitations directed to well planning. *See* Office Action dated November 12, 2008, pages 9-10. In view of this, Sriramdas fails to teach or suggest re-executing a portion of tasks, where the portion of the tasks is determined

using a task dependency to identify the instructions affected by a change in input data as explicitly recited in amended independent claim 1.

In addition, amended independent claim 1 recites, in part, that “said one or more tasks comprising a drillstring design task,” “said one or more sets of input data comprising pore pressure, fracture gradient, and unconfined compressive strength,” and “executing, by said task manager, said one or more sets of instructions and using, by said task manager, said one or more sets of input data to generate a set of results comprising a summary of a drillstring in each hole section of a wellbore.” In other words, amended independent claim 1 requires, in part, executing a managed set of drilling tasks to generate results including a summary of the drillstring. *See* Instant Specification, paragraphs [0053], [0072], and [00167].

The Examiner admits that Primavera fails to expressly teach a drillstring design task. *See* Office Action dated November 12, 2008. Similarly, Choi fails to expressly teach a drillstring design task as Choi only discusses managing workflows in a generic context. *See* Choi, abstract. Instead, the Examiner relies on Sriramdas to teach well planning.

Sriramdas teaches a system that facilitates well planning by “clearly defin[ing] the goals of drilling and completion.” *See* Sriramdas, page 48, paragraph 2. Further, Sriramdas teaches the basic components of a drill string design without describing a method for managing the generation of the drill string design. In other words, Sriramdas only teaches a system that provides a user with separate components that may be used to generate *portions* of a drill string design. *See id.* However, Sriramdas fails to teach a *managed* well design workflow for generating a set of results including a summary of the drillstring. In view of this, Sriramdas fails to teach or suggest executing a managed set of drillings tasks to generate results including a summary of the drillstring as

explicitly recited in amended independent claim 1.

In view of the above, Primavera, Choi, and Sriramdas, whether considered separately or in combination, fail teach or suggest all the limitations of claim 1. Thus, claim 1 is patentable over Primavera, Choi, and Sriramdas. In addition, amended independent claims 11 and 21 include at least the same patentable subject matter as claim 1 and, thus, are patentable over Primavera, Choi, and Sriramdas for at least the same reasons as claim 1. Further, dependent claims 2-5, 7-10, 12-15, 17-20, 22-25, and 27-58 include at least the same patentable subject matter as their independent claims and, thus, are patentable over Primavera, Choi, and Sriramdas for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

### **Conclusion**

Applicants believe this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number.: 09469/029002).

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Respectfully submitted,

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